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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,440	02/23/2004	Hashem Mohammad Ebrahimi	1565.068US1	2576

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EXAMINER	
KIM, JUNG W	

ART UNIT	PAPER NUMBER
2432	

NOTIFICATION DATE	DELIVERY MODE
09/21/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
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Office Action Summary	Application No.	Applicant(s)	
	10/784,440	EBRAHIMI ET AL.	
	Examiner	Art Unit	
	JUNG KIM	2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 August 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8,11-25,27 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8,11-25,27 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is in response to the amendment filed on 8/11/09

2. Claims 1-6, 8, 11-25, 27 and 28 are pending.

Information Disclosure Statement

3. The IDS submitted on 8/11/09 has been considered.

Priority

4. It is noted that the instant application is a continuation in part to application 10650211. However, the parent application does not disclose any embodiments that feature all limitations of each of the instant claims. For example, none of a forward proxy, reverse proxy and/or transparent proxy are identified as embodiments in the earlier application. Hence, the priority date with respect to the prior art for the instant application is the date of filing of the instant application. See amended specification filed on 1/21/09.

Response to Arguments

5. Applicant's arguments with respect to the amended claims have been considered but are not persuasive. Applicant argues in substance that the prior art does not disclose establishing a secure tunnel between the remote site and a local managing service, which acts as a forward proxy for the client and a reverse proxy for the server,

and between the local managing service and the client. See pg. 9 and 10 of the Remarks. It is first noted that based on the enabling disclosure of the instant specification, a secure tunnel between two nodes is established when a "secure communication" is established between two nodes. See pg. 7, lines 1-18. Furthermore, the instant specification defines SSL or TLS as one possible secure communication protocol to establish a secure communication between a client and a server. Hence, in light of this portion of the specification, and contrary to Applicant's allegation, Boneh discloses the limitation in question. In particular, Boneh discloses a web proxy that receives a connection request by a client browser to securely connect with a web site www.xyz.com; Boneh further discloses that the web proxy first establishes a TLS connection between the client and the web proxy, and then establishes a secure TLS connection between the web proxy and the web server. See for example, figs. 8 and 10. Both secure communications establish a trust relationship between the respective parties. Furthermore, the web proxy supports a caching service to directly provide cached content to the client without having to forward the request to the web server. This feature anticipates the limitations in question. For these reasons, the claims remain rejected under the prior art of record.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-6, 8, 10-25, 27 and 28 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-15, 17-22 and 24-26 of copending Application No. 10814983. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the instant claims are defined in claims 1, 3-15, 17-22 and 24-26 of copending Application No. 10814983.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-6, 8, 11-25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boneh et al. US 20040015725 (hereinafter Boneh).

10. As per claims 1-6, Boneh discloses a method for managing and accelerating the delivery of data implemented in a computer-readable storage medium and processed on a proxy device for performing the method, comprising:

a. receiving a secure communications request for data associated with a remote site, wherein the request is received from a client and the secure communications request occurs via Secure Socket Layer (SSL) communications with the client (paragraph 26) and wherein the request is received at a forward proxy that processes within a local processing environment of the client (fig. 4; paragraph 36, browser first sends a message CONNECT www.xyz.com to the web proxy; compare with paragraph 47, where no CONNECT messages is pre-appended); and

b. passing the request to a local managing service for processing acting as the forward proxy for the client, wherein the local managing service is capable of caching the data for servicing the secure communications request of the client within the local processing environment of the client and capable of securely interfacing with the remote site (paragraphs 34-42; client sends the connect request message to the web proxy; proxy performs caching on decrypted response);

c. the local managing service houses an identity for the remote site and local managing service is trusted by the remote site and the remote site delegates authority to the local managing service to vend data of the remote sites within the local processing environment of the client (paragraph 41, web proxy creates a TLS session to the site www.xyz.com; TLS session establishment entails certificate exchange and verification between the web proxy and the remote site; see also pg. 7, lines 13-18 of the instant specification);

d. creating, by the local proxy device, a secure communications tunnel between the client and the local managing service (paragraph 40, TLS session between the client and the web proxy; see for example paragraph 12 for TLS session generation); and

e. creating, by the proxy device, another secure communications tunnel between the local managing service and the remote site (paragraph 41, web proxy creates a TLS session with the site www.xyz.com);

f. determining, by the local managing service, when the secure communications request can be satisfied with cached data; and supplying the data from the cached data to the client with secure communications, when present in cache; requesting, by the local managing service, the data from the remote site if the data is not in the cache; receiving the data from the remote site; and supplying the data to the client with secure communications; housing the data in the cache for subsequent requests made by the client or other clients for

the data, when the data is permitted to be cached (paragraph 42, all features are inherent in caching services);

g. maintaining, by the local managing service, a certificate associated with communications from the remote site (paragraph 41);

h. transmitting, by the local managing service, to the remote site a first certificate associated with the identity of the local managing service;

receiving, from the remote site, at the local managing service a second certificate associated with the identity of the remote site; and communicating between the remote site and the local managing service with Secure Sockets Layer (SSL) communications using the first and second certificates (paragraph 41).

11. Although Boneh does not expressly disclose wherein the local service acts as a reverse proxy on behalf of the remote site from the local environment of the client, this feature is notoriously well known in the art. For example, Netscape Proxy Server v. 3.5 supports this feature (see for example, "Netscape Proxy Server Administrator's Guide Version 3.5 for Unix" Chapter 7 ["reverse mapping"] (entered 2/23/04)). It would be obvious to one of ordinary skill in the art at the time the invention was made wherein the local service acts as a reverse proxy on behalf of the remote site from the local environment of the client. One would be motivated to do so to hide the type of servers behind the reverse proxy as known to one of ordinary skill in the art. The aforementioned cover the limitations of claims 1-6.

12. As per claims 8 and 11-15, Boneh discloses a method of managing and accelerating delivery of data implemented in a computer-readable storage medium and to process within a local networking environment of a client for performing the method, comprising:

i. processing a local service of a proxy for communicating securely with the client and for acting on behalf of the client during interactions between the client and a remote site (fig. 4), wherein the local service processes within a local environment of the client and uses Secure Socket Layer (SSL) communications when interacting with the client (paragraph 26); managing authority from the remote site at the local service, wherein authority is managed by accessing a certificate of the remote site at the local service;

j. establishing a secure tunnel between the local service of the proxy and the client for interactions between the client and the local service (paragraph 51, secure TLS session between the client and the web proxy);

k. establishing another secure tunnel between the local service and the remote site for interactions between the local service and the remote site (paragraph 53, secure TLS session between the web proxy and the remote site); and

l. caching, within the local service, data received from the remote site, and wherein portions of the data are sent to the client in order to service data requests made from the client to the remote site (paragraphs 46-54);

m. initially transmitting a local service certificate to the remote site; and subsequently communicating securely between the local service and the remote site using the local service certificate and the certificate of the remote site (paragraph 53);

n. establishing the proxy as a transparent proxy for the client (paragraph 47);

o. inspecting at the proxy a secure request made from the client for the remote site; and transferring the secure request to the local service for processing (paragraph 52);

p. wherein caching further includes housing the data in a decrypted format within cache of the local service (paragraph 54, caching services are performed on decrypted response);

q. wherein caching further includes sending the portions of the data from the cache to the client along with the certificate associated with the remote site (paragraph 49 and 54 [cache services]).

13. Although Boneh does not expressly disclose wherein the local service presents itself to the client as the remote site and acts as a reverse proxy on behalf of the remote site from the local environment of the client, this feature is notoriously well known in the art. For example, Netscape Proxy Server v. 3.5 supports this feature (see for example, "Netscape Proxy Server Administrator's Guide Version 3.5 for Unix" Chapter 7 ["reverse mapping"] (entered 2/23/04)). It would be obvious to one of ordinary skill in the art at the time the invention was made wherein the local service presents itself to the client as the remote site and acts as a reverse proxy on behalf of the remote site from the local

environment of the client. One would be motivated to do so to hide the type of servers behind the reverse proxy as known to one of ordinary skill in the art. The aforementioned cover the limitations of claims 8 and 11-15.

14. As per claim 16-22, Boneh discloses a data management and acceleration delivery system implemented in computer-readable storage media and to process on devices of a network, the system comprising:

r. a proxy; a local service accessible to the proxy; and a remote site external to the proxy, wherein the proxy directs secure requests received from a client for the remote site to the local service (fig. 4), the local service acts as a transparent proxy on behalf of the client and communicates securely with the client using Secure Socket Layer (SSL) communications (paragraph 26) via a first secure tunnel established by the proxy for interactions between the local service and the client, and the local service interacts securely with the remote site via a second secure tunnel established by the proxy for interactions between the local service and the remote site, the interactions between the local service and the remote site is to acquire data on behalf of the client, and wherein portions or all of the acquired data are cached within the local service and used to service requests made by the client from within a local environment of the client (paragraphs 46-54; in particular, in paragraph 51, secure TLS session between the client and the web proxy is established, and in paragraph 53, secure TLS session between the web proxy and the remote site is established);

s. wherein the local service includes a certificate with an identity of the remote site which is vended to the client (paragraphs 37 and 49);

t. wherein the local service and remote site mutually interact securely with one another by exchanging certificates with one another (paragraph 53);

u. wherein the local service and the remote site sign communications occurring between them (in SSL client authentication and key exchange is performed via signature);

v. wherein the client is a browser application (paragraph 46);

w. wherein the browser is configured to contact the proxy when making requests directed to the remote site (paragraph 48);

x. wherein the proxy intercepts requests made from the browser which are directed to the remote site and forwards the requests to the local service for handling the requests (paragraph 46).

15. Although Boneh does not disclose the local service acts as a reverse proxy on behalf of the remote site, this feature is notoriously well known in the art. For example, Netscape Proxy Server v. 3.5 supports this feature (see for example, "Netscape Proxy Server Administrator's Guide Version 3.5 for Unix" Chapter 7 ["reverse mapping"] (entered 2/23/04)). It would be obvious to one of ordinary skill in the art at the time the invention was made wherein the local service acts as a reverse proxy on behalf of the remote site. One would be motivated to do so to hide the type of servers behind the reverse proxy as known to one of ordinary skill in the art. The aforementioned cover the limitations of claims 16-22.

16. As per claims 23-25, 27 and 28, Boneh discloses a data management and acceleration delivery system implemented in a computer-readable storage medium and to process on one or more devices of a network, the system comprising:

y. a proxy; and one or more local services directly accessible to the proxy, wherein the proxy acts as an intermediary between one or more clients and one or more remote sites (fig. 4), the proxy detects attempts made by the clients for establishing secure communications with the remote sites and based on the identities of a particular client and particular remote site identifies a particular local service, the particular local service communicates securely with the particular client, via Secure Socket Layer (SSL) (paragraph 26) communications as a transparent proxy to the particular client and via a first tunnel established by the proxy between the particular local service and the particular client, and the particular local service also securely communicates with the particular remote site via a second tunnel established by the proxy between the particular local service and the particular remote site, and wherein the particular local service caches data received from the particular remote site for purposes of servicing requests for portions of that data requested by the particular client and the cached data resides within local environments of the particular client (paragraphs 46-54; in particular, in paragraph 51, secure TLS session between the client and the web proxy is established, and in paragraph 53, secure TLS session between the web proxy and the remote site is established);

z. wherein each local service is associated with a unique one of the remote sites (paragraph 31);

aa. further comprising switching logic that intercepts requests from the clients which are directed to the remote sites and forwards them to the proxy (paragraph 46);

bb. wherein each of the local services includes a certificate associated with a unique one of the remote sites; wherein a number of the local services communicates securely with a number of the remote sites by initially exchanging mutual certificates (the invention operates via SSL or TLS).

17. Although Boneh does not disclose the particular local service securely communicates with the particular remote site as a reverse proxy for the particular remote service this feature is notoriously well known in the art. For example, Netscape Proxy Server v. 3.5 supports this feature (see for example, "Netscape Proxy Server Administrator's Guide Version 3.5 for Unix" Chapter 7 ["reverse mapping"] (entered 2/23/04)). It would be obvious to one of ordinary skill in the art at the time the invention was made wherein the particular local service securely communicates with the particular remote site as a reverse proxy for the particular remote service. One would be motivated to do so to hide the type of servers behind the reverse proxy as known to one of ordinary skill in the art. The aforementioned cover the limitations of claims 23-25, 27 and 28.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19. Bellwood et al. US 6,584,567 discloses a proxy establishing a secure communication between a client and a set of servers and further providing caching services.

20. Chawla et al. US 7,137,143 discloses a secure reverse proxy establishing separate secure connections between a client and a web server and further providing caching services.

21. "Secures Sockets Layer Discussion List FAQ v1.1.1," pg. 7 (entered 9/17/08) discloses establishing separate secure connections between a client and a Netscape Proxy server and between a Netscape Proxy server and an external server.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jung Kim/
Primary Examiner, AU 2432